## CS-334

# Principles and Techniques of Data Science

Assignment 3

### Lead TAs:

Part 1: Ahsan Amin

Part 2: Farrukh Masood

#### **Plagiarism Policy**

The course policy about plagiarism is as follows:

- 1. Students must not share the actual program code with other students.
- 2. Students must be prepared to explain any program code they submit.
- 3. Students cannot copy code from the Internet.
- 4. Students must indicate any assistance they received.
- 5. All submissions are subject to automated plagiarism detection. Students are strongly advised that any act of plagiarism will be reported to the Disciplinary Committee.

#### **Late Submission Policy**

You are allowed 5 "free" late days during the semester (that can be applied to one or more assignments) If you submit your work late for any assignment once your 5 "free" late days are used, the following penalty will be applied:

- 10% for work submitted up to 24 hours late
- 20% for work submitted up to 2 days late
- 30% for work submitted up to 3 days late
- 100% for work submitted after 3 days (i.e., you cannot submit your assignment more than 3 days late after you have used your 5 free late days

#### **Assignment Description**

This assignment is based on the causal inference(Part 1) and statistical inference(Part 2).

Notebooks for both the parts are given in the folders named part 1 and part 2. Both parts are independent of each other so you can solve them in any order. You may test your code using the test cases provided to you. However, there are some hidden test cases as well. Please note that your code must work for both types of tests to get full credit. Hardcoded values will not be awarded any credit. Further details are given in the respective notebooks.

#### **Marks Distribution**

Part 1: 50 Marks

Part 2: 50 Marks

#### **Submission Guidelines**

- You should name both notebooks as YourRollNumber\_PartNumber.ipynb. (e.g. the first part should be named as 2XXXXXX\_1.ipynb)
- You must submit a zip folder containing just two notebooks and it must not have any folder or any other file.
- Use the following naming convention for the submission: .zip For example, if your roll number is 22100277, then your zip file name should be: 22100277.zip